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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,333	03/12/2001	Subramanian Meiyappan	CISCP675	1800
26541	7590	03/25/2004	EXAMINER	
RITTER, LANG & KAPLAN 12930 SARATOGA AE. SUITE D1 SARATOGA, CA 95070			DO, CHAT C	
			ART UNIT	PAPER NUMBER
			2124	6

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/805,333

Applicant(s)

MEIYAPPAN, SUBRAMANIAN

Examiner

Chat C. Do

Art Unit

2124

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 3/12/01;7/6/01;7/31/01;2/26/02.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5</u>   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 6 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claim 6, the limitation cited “digital signal...to analog converter” in lines 1-2 is mis-descriptive. For examination purposes, the examiner considers this limitation as the digital signal is obtained from an output of an analog to digital converter. Re claim 12 has the same problem.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Koopman (U.S. 5,757,923).

Re claim 1, Koopman discloses in Figures 1-2 a method for generating a random value (output of crypto-secure bit hashing) method comprising: monitoring a signal

obtained from a communication channel (microphone collects data from fan in Figure 2), signal including additive noise (inherently); sampling signal to generate a random value (25 in Figure 1); and storing random value (42).

Re claim 2, Koopman further discloses in Figures 1-2 using random value as input to a cryptographic key generation process (right portion of Figure 2).

Re claim 3, Koopman further discloses in Figures 1-2 sampling comprises: sampling at times determined by output of a linear feedback shift register (feedback polynomial selection in Figure 2).

Re claim 4, Koopman further discloses in Figures 1-2 monitoring comprises monitoring a digital signal represented by multiple bits (col. 5 lines 60-62).

Re claim 5, Koopman further discloses in Figures 1-2 reordering multiple bits prior to sampling (data shuffling in Figure 2).

Re claim 6, Koopman further discloses in Figures 1-2 digital signal obtained from an output of an analog to digital converter (25 in Figure 1).

Re claim 7, it is a means apparatus claim of claim 1. Thus, claim 7 is also rejected under the same rationale in the rejection of rejected claim 1.

Re claim 8, it is a means apparatus claim of claim 2. Thus, claim 8 is also rejected under the same rationale in the rejection of rejected claim 2.

Re claim 9, it is a means apparatus claim of claim 3. Thus, claim 9 is also rejected under the same rationale in the rejection of rejected claim 3.

Re claim 10, it is a means apparatus claim of claim 4. Thus, claim 10 is also rejected under the same rationale in the rejection of rejected claim 4.

Re claim 11, it is a means apparatus claim of claim 5. Thus, claim 11 is also rejected under the same rationale in the rejection of rejected claim 5.

Re claim 12, it is a means apparatus claim of claim 6. Thus, claim 12 is also rejected under the same rationale in the rejection of rejected claim 6.

Re claim 13, it is an apparatus claim of claim 1. Thus, claim 13 is also rejected under the same rationale in the rejection of rejected claim 1.

Re claim 14, Koopman further discloses in Figures 1-2 a sampler that samples signal to generate random value (output of 25 in Figure 1).

Re claim 15, it is an apparatus claim of claim 3. Thus, claim 15 is also rejected under the same rationale in the rejection of rejected claim 3.

Re claim 16, Koopman further discloses in Figures 1-2 signal comprises a digital signal (output of crypto-secure bit hashing in Figure 2).

Re claim 17, it is an apparatus claim of claim 5. Thus, claim 17 is also rejected under the same rationale in the rejection of rejected claim 5.

Re claim 18, it is an apparatus claim of claim 6. Thus, claim 18 is also rejected under the same rationale in the rejection of rejected claim 6.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. U.S. Patent No. 6,188,294 to Ryan et al. disclose a method and apparatus for random sequence generator.

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b. U.S. Patent No. 6,374,278 to Korn et al. disclose a method and apparatus for the generation of statistically random number.

c. U.S. Patent No. 5,696,828 to Koopman discloses a random number generating system and process based on chaos.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chat C. Do whose telephone number is (703) 305-5655. The examiner can normally be reached on M => F from 7:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chaki Kakali can be reached on (703) 305-9662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chat C. Do  
Examiner  
Art Unit 2124

March 17, 2004



**TODD INBERG**  
**PRIMARY EXAMINER**